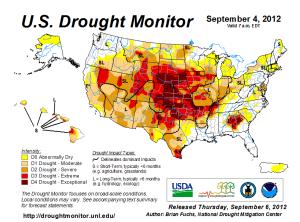
Summer 2012 Drought Update

According to the September 4, 2012 U.S. Drought Monitor, moderate (D1) to exceptional (D4) drought



covers 63.4% of the contiguous U.S. This is up from 62.9% last week, even with Hurricane Isaac easing conditions in some locations. Exceptional drought (D4) rose to 6.1%. The U.S. Drought Monitor is a partnership between NOAA, the U.S. Department of Agriculture, and the National Drought Mitigation Center and represents an assessment of drought conditions drawn from hundreds of indicators and peer-reviewed by experts in the field.

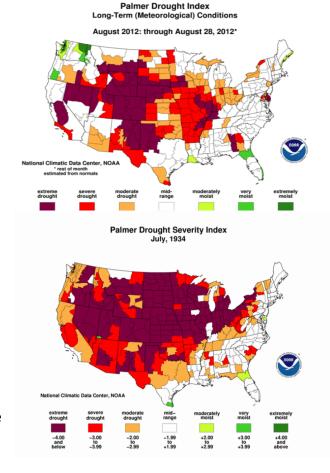
According to the weekly Palmer Drought Severity Index, a single index but for which we have a long history, *moderate to extreme* drought conditions covered 54.7% of the U.S. on August 28, 2012.

Comparison to droughts of 1930s and 1950s

In most places in the United States, drought conditions began this summer, with low rainfall exacerbated by high temperatures. Analyses comparing the current drought with the droughts of the 1930s are ongoing; however, across much of central the U.S., the current drought onset is similar to the drought of summer 1988. Both the 1930s and 1950s droughts covered greater areas than currently with drought peaking at 79.9% of the U.S. in July 1934 and 60.4% in July 1954.

La Niña and El Niño

La Niña is largely responsible for drought conditions in the Southern Plains. In 2011, the worst one-year drought on record in Texas occurred during a La Niña event that



began in the previous year and ended by summer. A second La Niña in late 2011 and early 2012 brought lingering drought conditions to the Southern Plains. The return to the current neutral ocean conditions in the equatorial Pacific and the prediction of potential El Niño development later this year, as reported by NOAA's Climate Prediction Center, generally mean we expect above normal precipitation across much of the southern tier of the U.S. Additionally, we expect drier conditions in the Ohio Valley.







Drought Outlook

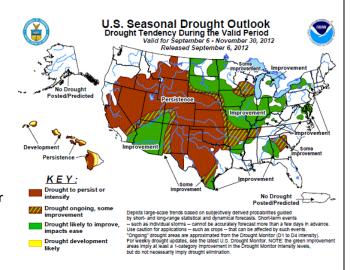
The NOAA Climate Prediction Center's <u>U.S. Drought</u>
<u>Outlook</u> issued last week points to drought conditions
lingering or intensifying over most of the United States.
Exceptions include the Southwest and Southeast, where
limited improvement is suggested.

Drought Impacts

USDA's World Agriculture Outlook Board, as of September 4, estimates that 83% of the corn grown in the U.S. is experiencing drought. Similarly, 80% of soybeans, 63% of hay, and 72% of cattle are experiencing drought. This has resulted in a reduction in corn and soybean production since July. The U.S. Drought Impact Reporter also keeps track of U.S. drought impacts.

Droughts and Climate Change

Certain weather and climate extremes, such as more frequent or severe floods and droughts, are predicted to be more likely with climate change. However, the role of climate change in this drought is uncertain. Conditions have been as bad, or worse, than the current drought numerous times in our instrumental record, maintained by NOAA. According to the recent IPCC (2012) report on





extreme events and disasters, there is medium confidence that some regions of the world have witnessed more intense and longer droughts, but in some regions including central North America, droughts have become less frequent, less intense, or shorter in duration since about 1950. Conditions over the Great Plains and Midwest have been as bad, or worse, than the current drought numerous times in our instrumental record.

Sources for more information

The U.S. Drought Portal http://www.drought.gov

The National Drought Mitigation Center http://drought.unl.edu

NOAA Climate Prediction Center http://www.cpc.ncep.noaa.gov

The National Climatic Data Center http://www.ncdc.noaa.gov





